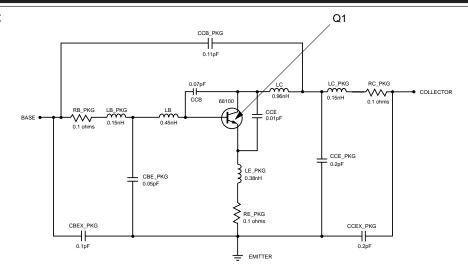


# **NONLINEAR MODEL**

**NE68035** 

### **SCHEMATIC**



## **BJT NONLINEAR MODEL PARAMETERS (1)**

Parameters	Q1	Parameters	Q1
IS	3.84e-16	MJC	0.64
BF	124.9	XCJC	0
NF	1.05	CJS	0
VAF	11.9	VJS	0.75
IKF	0.027	MJS	0
ISE	1.0e-14	FC	0.5
NE	2.17	TF	8.7e-12
BR	1	XTF	18
NR	1.05	VTF	19.1
VAR	Infinity	ITF	0.082
IKR	Infinity	PTF	0
ISC	0	TR	0.635e-9
NC	2	EG	1.11
RE	0.6	XTB	0
RB	17.9	XTI	3
RBM	1.02	KF	0
IRB	4.01e-4	AF	1
RC	10.5		
CJE	0.358e-12		
VJE	0.71		
MJE	0.5		
CJC	0.162e-12		
VJC	0.79		

#### **UNITS**

Parameter	Units	
time	seconds	
capacitance	farads	
inductance	henries	
resistance	ohms	
voltage	volts	
current	amps	

## MODEL RANGE

Frequency: 0.05 to 5.0 GHz

Bias: VCE = 6 V, IC = 5 mA to 20 mA

Date: 10/31/96

(1) Gummel-Poon Model

-California Eastern Laboratories